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	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR			ATTORNEY DOCKET NO.	
	09/013,490	01/26/98	TUZHILIN		A	2011/13	
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	BAKER BOTTS L.L.P.		TM02/1023		WINDER, P		
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	NEW YORK NY	7 10112			2155 DATE MAILED:	w	
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Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

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# . Office Action Summary

Application No. 09/013,490

Applicant(s)

Tuzhilin et al.

Examiner

Patrice L. Winder

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— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —						
Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply be considered timely.  - If NO period for reply is specified above, the maximum statutory period w communication.  - Failure to reply within the set or extended period for reply will, by statute,  - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	6 (a). In no event, however, may a reply be timely filed within the statutory minimum of thirty (30) days will fill apply and will expire SIX (6) MONTHS from the mailing date of this cause the application to become ABANDONED (35 U.S.C. § 133).					
Status 1) ☑ Responsive to communication(s) filed on <u>Jul 13, 200</u>	01					
2a) ☑ This action is FINAL. 2b) ☐ This action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle35 C.D. 11; 453 O.G. 213.						
Disposition of Claims						
4) X Claim(s) <u>38, 39, 41-59, and 61-85</u>	is/are pending in the applica					
4a) Of the above, claim(s)	is/are withdrawn from considera					
5)	is/are allowed.					
6) ☑ Claim(s) <u>38, 39, 41-59, and 61-85</u>	is/are rejected.					
7)	is/are objected to.					
8) Claims are subject to restriction and/or election require						
Application Papers  9) ☐ The specification is objected to by the Examiner.  10) ☐ The drawing(s) filed on is/ar  11) ☐ The proposed drawing correction filed on  12) ☐ The oath or declaration is objected to by the Examiner	is: a pproved b disapproved.					
Priority under 35 U.S.C. § 119  13)  Acknowledgement is made of a claim for foreign prior	ity under 35 U.S.C. § 119(a)-(d).					
a) All b) Some* c) None of:	een received					
Certified copies of the priority documents have be	een received in Application No					
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>*See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
14) Acknowledgement is made of a claim for domestic pri						
Attachment(s)						
15) Notice of References Cited (PTO-892)	18) Interview Summary (PTO-413) Paper No(s).					
16) Notice of Draftsperson's Patent Drawing Review (PTO-948)	19) Notice of Informal Patent Application (PTO-152)					
17) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 20) Other:						

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

- 1. The text of those sections of Title 35, U.S. Code 102 not included in this action can be found in a prior Office action.
- 2. Claims 38-39, 41-43, 45-47, 50-59, 61-63, 65-67 and 70-83 are rejected under 35 U.S.C. 102(e) as being anticipated by Hunt et al., U.S. Patent No. 5,893,091 (hereafter referred to as Hunt).
- 3. Regarding claim 38, Hunt taught an apparatus for monitoring information on a network, comprising:

a storage device storing a predefined criterion (notification criterion), and having a monitoring module thereon (modules for comparing alerts with keywords of notification criterion, col. 7, line 63 - col. 8, line 2); and

a processing device executing the monitoring module to transmit at least one instruction to the network (client registration to receive alerts = request, col. 8, lines 52-55), the at least one instruction requesting a performance of a monitoring operation to monitor the information on the network as a function of the predetermined criterion, the processing device is adapted to receive data from the network based on at least one result of the monitoring operations (parsing and filtering engine 88, col. 8, lines 16-20, col. 13, lines 10-19)

wherein the information includes at least one event which is used for detecting a change

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on the network (keyword = event, appearance of keyword on network = change, col. 8, lines 14-20).

- 4. Regarding dependent claim 39, Hunt taught the processing device provides the at least one result to at least one user (col. 8, lines 18-20, col. 9, lines 22-27).
- 5. Regarding dependent claim 41, Hunt taught the predefined criteria includes at least one condition (conditions revealed in logical Boolean expression, col. 13, lines 28-30).
- 6. Regarding claim 42, Hunt taught an apparatus for monitoring information on a network, comprising:

a storage device storing a predefined criterion and having a monitoring module thereon:

a storage device storing a predefined criterion (notification criterion), and having a monitoring module thereon (modules for comparing alerts with keywords of notification criterion, col. 7, line 63 - col. 8, line 2); and

a processing device executing the monitoring module to transmit at least one instruction to the network (client registration to receive alerts = request, col. 8, lines 52-55), the at least one instruction requesting a performance of a monitoring operation to monitor the information on the network as a function of the predetermined criterion, the processing device is adapted to receive data from the network based on at least one result of the monitoring operations (parsing and filtering engine 88, col. 8, lines 16-20, col. 13, lines 10-19)

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wherein the information includes at least one event (keyword = event) and at least one condition (dependent on Boolean operator, col. 13, lines 28-30), and wherein the predefined criterion is a rule-based criterion which enables the monitoring operation to monitor for the at least one event on the network and to check if a certain condition of the at least one condition is satisfied (adapted to check for alerts that match notification criterion, col. 8, lines 16-20).

7. Regarding dependent claim 43, Hunt taught the rule-based criterion includes:

at least one of a WHEN portion (1st keyword = when) and an IF portion (Boolean operator establishes condition, col. 13, lines 28-30), and a THEN portion (col. 13, lines 25-28), and

wherein the THEN portion includes a probing action which has at least one probing operator (col. 9, lines 17-21).

- 8. Regarding dependent claim 45, Hunt taught the IF portion includes the at least one condition is complex (col. 10, lines 34-39).
- 9. Regarding dependent claim 46, Hunt taught the at least one complex condition includes at least one of:

an atomic condition (single keyword), and a combination of atomic conditions (combination of keywords, col. 10, lines 43-48).

10. Regarding dependent claim 47, Hunt taught the atomic condition includes at least one literal portion (defined with Boolean operators, col. 13, lines 25-30).

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- 11. Regarding dependent claim 50, Hunt taught the monitoring operation is performed on a client station (col. 12, lines 57-62, col. 13, lines 10-19).
- 12. Regarding dependent claim 51, Hunt taught the processing device performs the monitoring operation (col. 12, lines 57-62, col. 13, lines 10-19).
- 13. Regarding claim 52, Hunt taught an apparatus for monitoring information on a network, comprising:

a storage device storing a predefined criterion (notification criterion), and having a monitoring module thereon (modules for comparing alerts with keywords of notification criterion, col. 7, line 63 - col. 8, line 2); and

a processing device executing the monitoring module to transmit at least one instruction to the network (client registration to receive alerts = request, col. 8, lines 52-55), the at least one instruction requesting a performance of a monitoring operation to monitor the information on the network as a function of the predetermined criterion, the processing device is adapted to receive data from the network based on at least one result of the monitoring operations (parsing and filtering engine 88, col. 8, lines 16-20, col. 13, lines 10-19)

wherein the at least one result includes a copy of at least one monitored predicate (result includes copy of particular argument values specific to result = predicate, col. 10, lines 49-53).

14. Regarding claim 53, Hunt taught an apparatus for monitoring information on a network, comprising:

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a storage device storing a predefined criterion (notification criterion), and having a monitoring module thereon (modules for comparing alerts with keywords of notification criterion, col. 7, line 63 - col. 8, line 2); and

a processing device executing the monitoring module to transmit at least one instruction to the network (client registration to receive alerts = request, col. 8, lines 52-55), the at least one instruction requesting a performance of a monitoring operation to monitor the information on the network as a function of the predetermined criterion, the processing device is adapted to receive data from the network based on at least one result of the monitoring operations (parsing and filtering engine 88, col. 8, lines 16-20, col. 13, lines 10-19)

wherein the at least one result includes a copy of a portion of at least one monitored predicate (result includes copy of particular argument values specific to result = predicate, in this example a small portion of the available stock information values, col. 10, lines 49-53).

- 15. Regarding dependent claim 54, Hunt taught the monitoring operation is performed by exploring particular data on client sites which are connected to the network (using local keyword profiles, col. 7, line 65 col. 8, line 3).
- 16. Regarding dependent claim 55, Hunt taught an atomic condition (single keyword), and a combination of atomic conditions (combination of keywords, col. 10, lines 43-48).
- 17. Regarding dependent claim 56, Hunt taught the at least one event is one of an instantaneous event (appearance of alert = instantaneous event) and an event which extends over a period of time (col. 8, lines 12-20).

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18. Regarding dependent claim 57, Hunt taught the WHEN portion is used to monitor for an occurrence of at least one event (occurrence of keywords in alerts, col. 13, lines 25-28).

- 19. The language of claims 58-59, 61-63, 65-67, 70-77 is substantially the same as previously rejected claims 38-39, 41-43, 45-47, 50-57. Therefore, claims 58-59, 61-63, 65-67, 70-77 are rejected on the same rationale as previously rejected claims 38-39, 41-43, 45-47, 50-57.
- 20. Regarding claim 78, Hunt taught an apparatus for monitoring information on a network, comprising:

a storage device storing a predefined criterion (notification criterion), and having a monitoring module thereon (modules for comparing alerts with keywords of notification criterion, col. 7, line 63 - col. 8, line 2); and

a processing device executing the monitoring module to transmit at least one instruction to the network (client registration to receive alerts = request, col. 8, lines 52-55), the at least one instruction requesting a performance of a particular operation to continuously monitor the information on the network as a function of the predetermined criterion (receiving alerts as issued from the Timely Information Server = continuously monitor, col. 9, lines 13-21), the processing device is adapted to receive data from the network based on at least one result of the particular operation (parsing and filtering engine 88, col. 8, lines 16-20, col. 13, lines 10-19).

21. Regarding dependent claim 79, Hunt taught the at least one result is obtained when at least one condition is satisfied (result when match notification criterion, col. 8, lines 16-20).

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22. Regarding claim 80, Hunt taught a method for monitoring information on a network, comprising:

receiving a predefined criterion (col. 9, lines 57-61);

continuously monitoring the information on the network as a function of the predefined criterion (receiving alerts as issued from the Timely Information Server = continuously monitor, col. 9, lines 13-21); and

receiving data from the network based on at least one result of the monitoring step (col. 9, lines 13-21).

- 23. Regarding dependent claim 81, Hunt taught further comprising the step of:
  obtaining the at least one result when at least one condition is satisfied (result when match
  notification criterion, col. 8, lines 16-20).
- 24. Regarding claim 82, Hunt taught an apparatus for monitoring information on a network, comprising:

a storage device storing a predefined criterion (notification criterion), and having a monitoring module thereon (modules for comparing alerts with keywords of notification criterion, col. 7, line 63 - col. 8, line 2); and

a processing device executing the monitoring module to transmit at least one instruction to the network (client registration to receive alerts = request, col. 8, lines 52-55), the at least one instruction requesting a performance of a particular operation to regularly monitor the information on the network as a function of the predetermined criterion (Timely Information Server regularly

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derives alerts and regularly broadcasts alerts = regularly monitoring, col. 12, lines 6-9), the processing device is adapted to receive data from the network based on at least one result of the particular operation (parsing and filtering engine 88, col. 8, lines 16-20, col. 13, lines 10-19)

25. Regarding claim 83, Hunt taught a method for monitoring information on a network, comprising:

receiving a predefined criterion (col. 9, lines 57-61);

regularly monitoring the information on the network as a function of the predefined criterion (Timely Information Server regularly derives alerts and regularly broadcasts alerts = regularly monitoring, col. 12, lines 6-9); and

receiving data from the network based on at least one result of the monitoring step (col. 9, lines 13-21).

26. Regarding dependent claims 84 and 85, Hunt taught the at least one event is detected on the network (keyword = event, appearance of keyword on network = change, col. 8, lines 14-20).

## Claim Rejections - 35 USC § 103

- 27. The text of those sections of Title 35, U.S. Code 103 not included in this action can be found in a prior Office action.
- 28. Claims 44 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hunt.
- 29. Regarding dependent claims 44 and 64, Hunt does not specifically teach the probing operator includes a data mining query. However, Hunt taught the probing operator includes a

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sequence of instruction for gathering information (col. 9, lines 51-56). "Official notice" is taken that data mining is well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made that incorporating conventional data mining in Hunt's monitoring system would have improved system effectiveness. The motivation would have been to improve Hunt's ability to gather tracking information (col. 5, line 62 - col. 6, line 2).

- 30. Claims 48-49 and 68-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hunt in view of A. Prasad Sistla et al., Temporal Conditions and Integrity Constraints in Active Database Systems (hereafter referred to as Sistla).
- 31. Regarding dependent claim 48, Hunt does not specifically teach the atomic condition includes at least one binary past temporal operator. However, Sistla taught an atomic condition includes at least one binary past temporal operator (page 4, Section 4.1, paragraph 1).
- 32. Regarding dependent claim 49, Hunt does not specifically teach the atomic condition includes at least one unary past temporal operator. However, Sistla taught atomic condition includes at least one unary past temporal operator (page 4, Section 4.1, paragraph 1).
- 33. As to claims 48-49, it would have been obvious to one of ordinary skill in the art at the time the invention was made that incorporating Sistla's Past Temporal Logic in Hunt's monitoring system would have improved the monitoring system's effectiveness by incorporating more flexible monitoring criterion. The motivation would have been because Past Temporal Logic can be combined with any query language and proves improved condition-action statements used in active monitoring.

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34. The language of claims 68-69 is substantially the same as previously rejected claims 48-49. Therefore, claims 68-69 are rejected on the same rationale as previously rejected claims 48-49.

#### Response to Arguments

- 35. Applicant's arguments filed July 13, 2001 have been fully considered but they are not persuasive.
- 36. Applicant argues "First, it is respectfully submitted that the Hunt Patent lacks any enabling disclosure regarding how the client 8a registers to receive alerts."
- a. Client 8a registers (i.e. subscribes) to receive alerts on a specified web page (col.11, lines 36-41).
- 37. Applicant argues "Second, Applicants respectfully assert that the Hunt Patent does not teach or suggest ... registration by the client prompts an execution of any monitoring module ..."
- a. Registration by the client determines which "alerts" are selected by the filtering module, i.e. Hunt's monitoring module (col. 11, lines 44-48).
- 38. Applicant argues "It follows that the Hunt Patent does not teach or suggest, much less disclose that the instruction requests a performance of a monitoring operation to monitor the information on the network as a function of a predetermined criterion."
- a. The "performance of a monitoring operation" is not analogous to the starting or initiating of the execution of a monitoring operation as suggested by applicant's arguments. The

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claim language recites "requests a performance of a monitoring operation". How this "execution" begins in not within the breadth of applicant's present claim language.

- 39. Applicant argues "Applicant's respectfully disagree, and submit that the keyword of the Hunt Patent cannot be equated to the event as recited in independent claims 42 and 62 of the above reference application. The reason for this is that in the Hunt Patent, the keyword is a static (i.e. non-changeable) part of the condition, while the event of Applicant's claimed by invention is dynamic (i.e. changeable) part of the condition."
- a. Hunt changing the keyword profile, explicitly and implicitly (col. 11, lines 41-43).
   40. Applicant argues "Applicant respectfully asserts that this recited probing action cannot

be equated to a mere Boolean expression of the Hunt Patent."

a. Hunt's "probing action" is taught by the application of Hunt's Boolean expression to determine an alert that fits the notification criteria. From there a sequence of instructions is performed, including the gathering and response program (col. 9, lines 51-56). The examiner is aware of page 37, lines 13-19 of the specification which support the "probing action" claimed. If other portions of specification support a different interpretation of a probing action please provide

them for consideration.

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41. Applicant argues - "Applicants respectfully assert that the literal portion recited in these

claims is a term of the art of logic programming and databases, which means either a negated or

non-negated predicate (e.g. a relation in a relational database)."

a. Predicates are taught as rejected above. Hunt taught the ability to negate using the

NOT operator (col. 13, lines 28-30).

Conclusion

42. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date

of this final action.

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43. Any inquiry concerning this communication or earlier communications from the examiner

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should be directed to Patrice Winder whose telephone number is (703) 305-3938. The examiner

can normally be reached on Monday-Friday from 10:30 AM to 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Ayaz Sheikh, can be reached on (703) 305-9648. The fax phone number(s) for this Group are

after final (703) 746-7238; official (703) 746-7239 and non-official/draft (703) 746-7240.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Patrice Winder

Primary Examiner

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